



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/533,685	03/23/2000	Michael Lee Hearn	600.1040	9876
23280	7590	05/15/2006		
DAVIDSON, DAVIDSON & KAPPEL, LLC 485 SEVENTH AVENUE, 14TH FLOOR NEW YORK, NY 10018			EXAMINER PETERSON, KENNETH E	
			ART UNIT	PAPER NUMBER
			3724	

DATE MAILED: 05/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/533,685	Applicant(s) HEARN, MICHAEL LEE	
	Examiner Kenneth E. Peterson	Art Unit 3724	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2006.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 22-30 and 33-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-30 and 33-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1. On 18 January 06, the Board of Appeals rendered a decision reversing all rejections in this case. The reversal was based upon a narrower interpretation of the claims that the Examiner had not previously considered, searched nor examined. Examiner accepts this new, narrower interpretation, and accordingly, prosecution is hereby reopened to address all the new issues that arise therefrom.

In the decision, the term "nip" was given the meaning of "*a location where the web is squeezed or compressed together so that the web in the nip does not slip or move with respect to the cylinder*" (page 5 of the decision).

2. Claims 22 and 33 are objected for the following minor informalities.

In claim 22, line 5, and in claims 33, line 6, "edges" should be changed to --sides--. As noted by the Board in it's decision (footnote, page 3), the nipping surfaces don't really extend to the blade edges, but instead extend to their sides.

In claim 33, the "A folder" should be changed to --A cutter--, since only a cutter is claimed.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 22,26,28,30 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Broderick (3,954,034).

Broderick shows a device with all of the recited limitations as follows;

In regards to claims 22 and 33, Broderick shows;

a 1<sup>st</sup> cutting cylinder (17) having a 1<sup>st</sup> segmented blade (24) with axially spaced cutting edges (28),

a 1<sup>st</sup> anvil cylinder (18),

a nip being capable of *"squeezing or compressing together so that the web in the nip does not slip or move with respect to the cylinder"*, said nip being made by the elastic material (29). The elastic material is *"sponge rubber or other suitably resilient material"* (line 63, column 2). The blow-up in figure 4 clearly shows the elastic material radially overlapping the anvil cylinder and thus causing the web to be squeezed. This is further supported by lines 30-35 of column 3, which makes clear that the elastic material grips the web.

In regards to claims 26 and 28, Broderick's 1<sup>st</sup> cutting cylinder has two metallic parts, namely the center portion (21) and a steel bearer (22). Likewise, Broderick's 1<sup>st</sup> anvil cylinder has two metallic parts, namely the center portion (30) and a steel bearer (31).

In regards to claim 30, Broderick has blades spaced 180 degrees apart, as seen in figure 2.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Broderick (3,954,034) in view of Sauer (3,522,762).

If it is interpreted that claims 26 and 28 means two *separable* parts, then attention is drawn to Sauer, who shows that it is old and well known for such cylinders to be made from two *separable* parts as seen in figures 3 and 5. It would have been obvious to one of ordinary skill in the art to have modified Broderick by making his cylinders be of the two *separable* parts type, as taught by Sauer, in order to make it easier to mount and dismount the cylinders from the axles.

8. Claims 33 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Broderick (3,954,034), as modified above or not, in view of Wolfberg et al. (3,866,497).

In regards to claim 36, Broderick shows a cutter with all of the recited limitations except there is no 2<sup>nd</sup> cutting cylinder and no 2<sup>nd</sup> anvil cylinder. However, Wolfberg shows that it is old and well known to employ a 2<sup>nd</sup> cutting cylinder and a 2<sup>nd</sup> anvil cylinder as seen in the cover figure (112, 116). It would have been obvious to one of ordinary skill in the art to have added a 2<sup>nd</sup> cutting cylinder and 2<sup>nd</sup> anvil cylinder to Broderick, as taught by Wolfberg, in order to increase the amount of perforations and/or better control the spacings of the perforations.

In regards to both claims 33 and 36, if it is interpreted that the claims titles of "a folder" infer some sort of structure for folding webs, than attention is drawn again to

Wolfberg, who teaches that it is known to use perforators in conjunction with folders. It would have been obvious to one of ordinary skill in the art to have utilized a folder with Broderick's perforator, in order to create cross-perforated snap-out business forms (Wolfberg's abstract).

Note that this rejection works equally well as Broderick in view of Wolfberg or Wolfberg in view of Broderick. Wolfberg could be modified to employ Broderick's perforators, in order to more firmly and accurately convey the web, as set forth on Broderick's lines 31-36 of column 3.

9. Claims 23,27,29,34 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Broderick (3,954,034), as modified above or not, in view of Irsik (5,967,512).

Broderick shows a cutter with all of the recited limitations except the 1<sup>st</sup> cutting cylinder nipping surface is not mentioned to be urethane. On line 63 of column 2, Broderick states surface (29) to be "*sponge rubber or other suitably resilient material strip*". The purpose of Broderick's surface 29, as set forth on lines 31-36 of column 3, is to firmly advance the material, thus preventing sagging and inaccurate cuts. The courts have long held that it is obvious to select a material based upon its known qualities. In this case, Irsik shows that it is well known for cylinders to employ urethane (line 22, column 3) for its nip surfaces (30,32). It would have been obvious to one of ordinary skill in the art to have modified Broderick by making the nipping surface out of urethane, as taught by Irsik, in order to firmly advance the material and also

accommodate different thickness materials (Irsik's lines 24,25, column 3). Since this urethane is clearly resilient, it would also perform Broderick's desired functions set forth on lines 31-36 of column 3.

10. Claims 24,25,35 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Broderick (3,954,034), as modified above or not, in view of Kirkpatrick, Jr. et al. (6,435,069).

Broderick shows a cutter with all of the recited limitations except the 1<sup>st</sup> anvil cylinder nipping surface is not mentioned to be surfaced in urethane. However, this is an extremely common feature. Hundreds of references can be pulled showing urethane covered anvil rollers. For example, see Kirkpatrick (lines 52,53, column 3). It would have been obvious to one of ordinary skill in the art to have modified Broderick by making the anvil of the type taught by Kirkpatrick, since urethane covered anvils have high cut and tear resistance as well as healing properties (again, Kirkpatrick's lines 52,53, column 3).

11. Made of record but not relied on are patents to Brown, Pfaff, Bussey and Kane showing pertinent nip surfaces.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ken Peterson whose telephone number is 571-272-4512. The examiner can normally be reached Mon-Thurs, 7:30AM-5PM

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan Shoap can be reached on 571-272-4514. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KP  
May 9, 2006



KENNETH E. PETERSON  
PRIMARY EXAMINER



BOYER D. ASHLEY  
SUPERVISORY PATENT EXAMINER



FREDERICK R. SCHMIDT  
DIRECTOR  
TECHNOLOGY CENTER 3700